Supplementary material to "The choice of baseline period influences the assessments of the outcomes of Stratospheric Aerosol Injection"

	2020-2039 (1.5)	2008-2027 (1.0)	1993-2012 (0.5)
dT1/dT0	0.25	0.28	0.33
dT2/dT0	0.39	0.36	0.32

Table S1 Values for the ratios dT1/dT0 and dT2/dT0, which explain the distribution on SO2 between the injection locations as explained in Section 3.1.

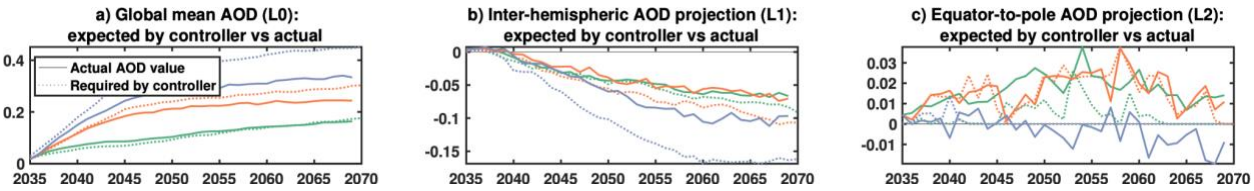

Fig S1 As in Fig.1, panels c-e) Values of L0 (global mean sAOD), L1 (inter-hemispheric sAOD projection) and L2 (equator-to-pole sAOD projection), but with added lines for the values as required by the feedback controller (dashed lines) as opposed to the ones actually simulated by the model.

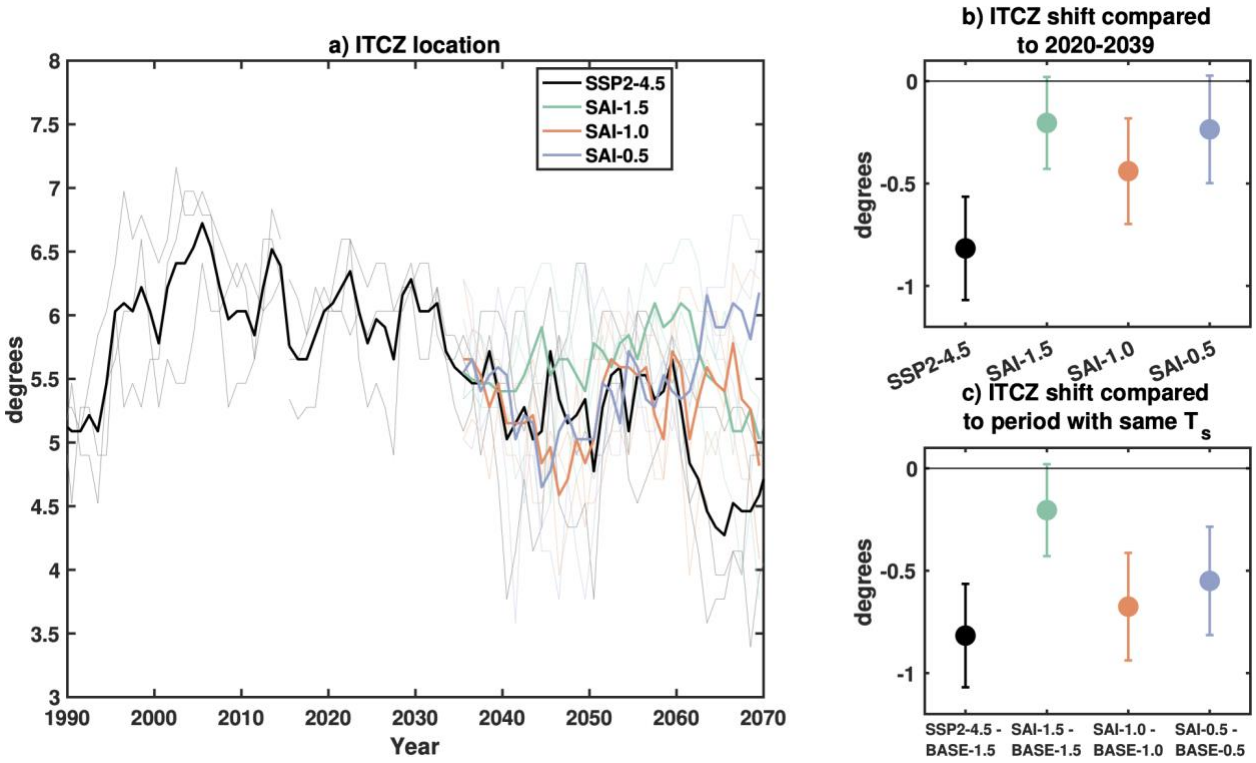

Figure S2. a) Annual mean ITCZ location for all experiments, with a moving average of 5 years applied for smoothing. b) Annual mean changes in the location of ITCZ (degrees) in 2050-2069 compared to the values in the period 2020-2039, approximated as the latitude around the equator where the meridional mass streamfunction at 500 hPa changes sign.c) Annual mean changes in the location of ITCZ (degrees) in 2050-2069 for the three SAI simulations compared to their respective temporal period with the same global mean surface temperature Error bars denote ±1 standard errors in the difference in means.

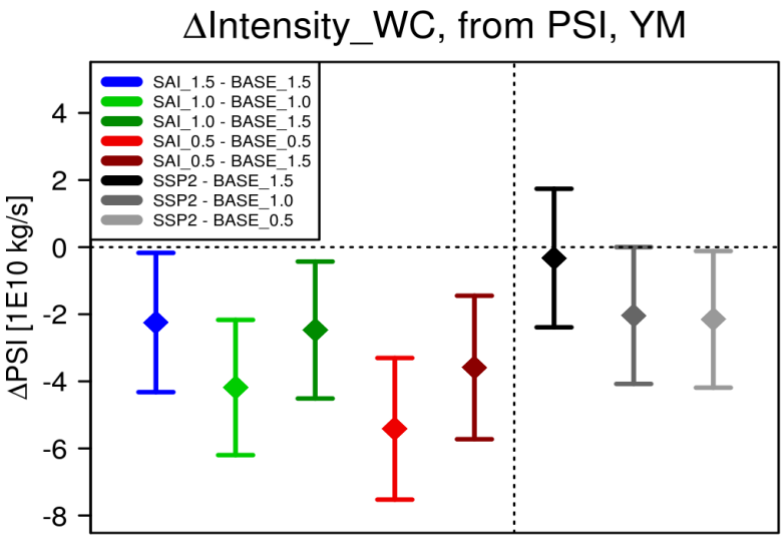

Figure S3. As in Figure 5 (left panel) but for the changes in Walker Circulation calculated as difference between zonal mass streamfunction at 400 hPa, averaged between 10S-10N, between Western Pacific (180E-240E) and Indian Ocean (60-120E).

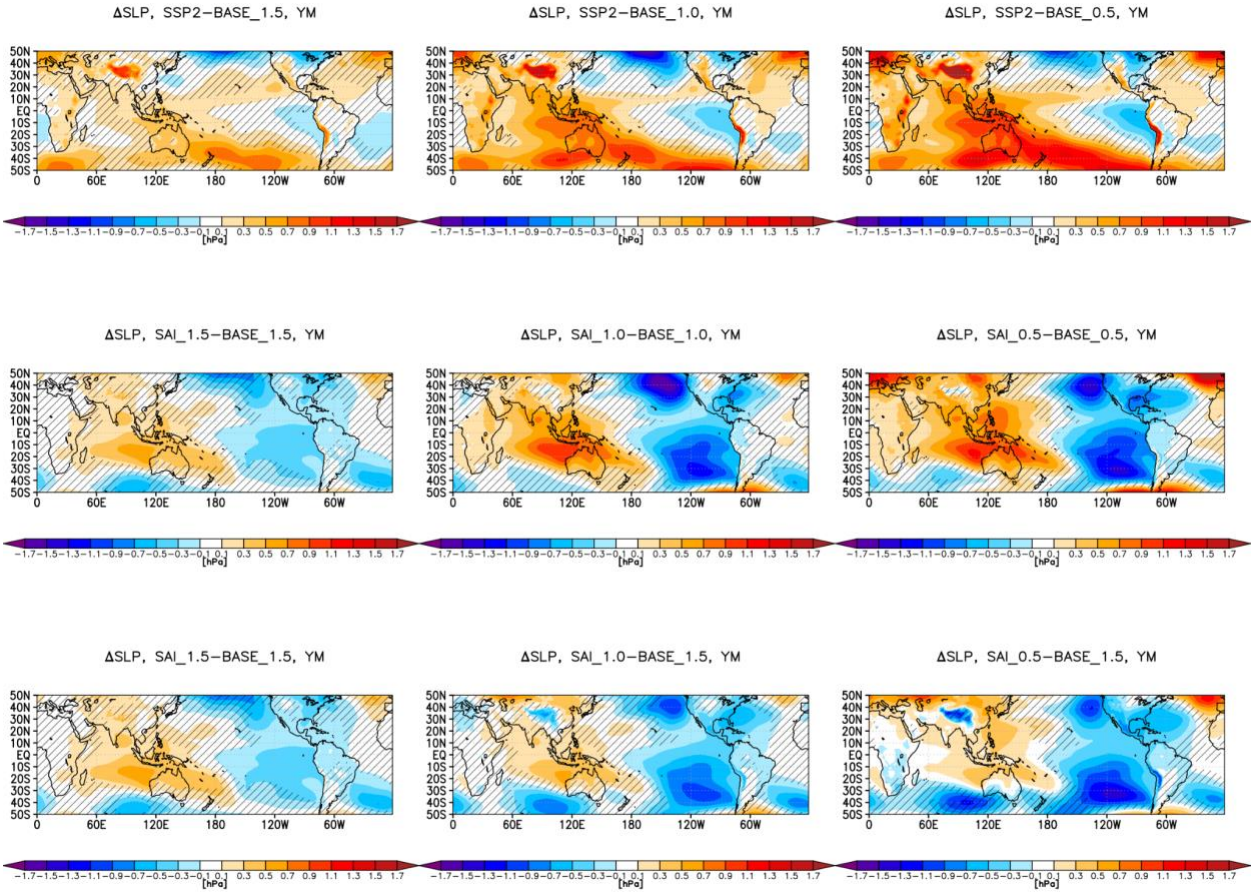

Figure S4. Annual mean changes in SLP (hPa).

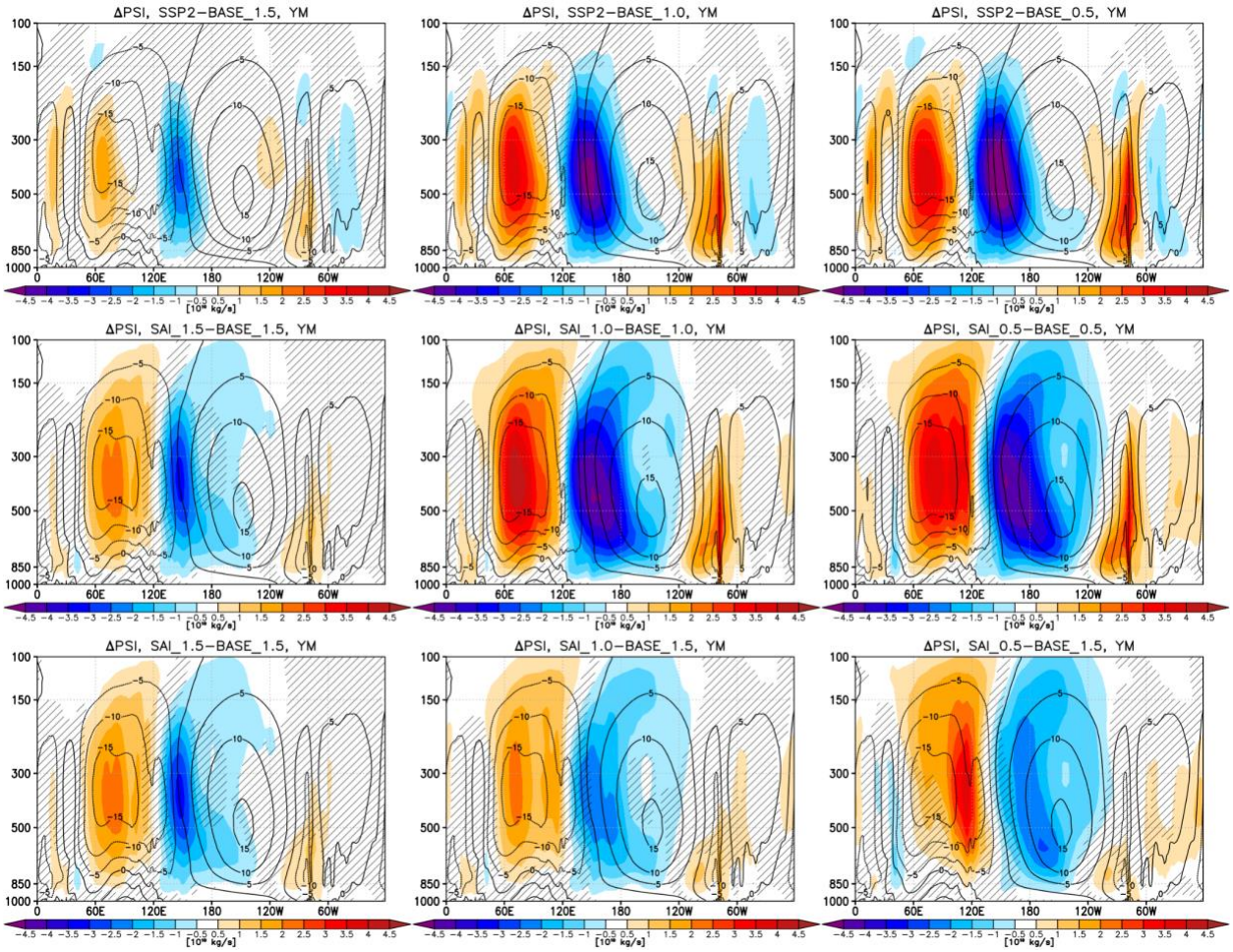

Figure S5. Annual mean changes in zonal mass stream function (10^{10} kg/s)**.**